WHAT IS CLAIMED IS:

1. A power controller comprising:

a switching device;

a heat sink in contact with the switching device for dissipating heat generated by the switching device, the heat sink including a base and a plurality of fins extending from the base;

a fan for forcing cooling air toward the heat sink; and

an air guide mounted to the heat sink for dividing the cooling air such that cooling air flows over the top of the heat sink and cooling air flows through the fins of the heat sink.

2. The power controller of claim 1, wherein the air guide may be adjusted to set a percentage of cooling air that flows over the top of the heat sink fins and a percentage of cooling air that flows through the fins of the heat sink.

3. The power controller of claim 1, further comprising a bus bar mounted to the switching device.

4. The power controller of claim 1, wherein the air guide completes a plenum chamber for forcing cooling air through the power controller.

5. The power controller of claim 1, wherein the air guide comprises a single piece.

6. The power controller of claim 1, further comprising a fan bracket for housing the fan and forming an end of the power controller.

7. The power controller of claim 1, further comprising a ventilated back plate for exhausting the cooling air and forming an end of the power controller.

8. The power controller of claim 7, wherein the ventilated back plate includes a plurality of exhaust holes on a rear surface thereof.

9. The power controller of claim 7, wherein the ventilated back plate includes a plurality of exhaust holes on a bottom surface thereof.

10. A power controller comprising:

a first switching device and a second switching device;

a first heat sink in contact with the first switching device for dissipating heat generated by the first switching device, the first heat sink including a base and a plurality of fins extending from the base; and

a second heat sink in contact with the second switching device for dissipating heat generated by the second switching device, the second heat sink including a base and a plurality of fins extending from the base,

wherein the base of the first heat sink is mounted to the base of the second heat sink to form a heat sink assembly.

11. The power controller of claim 10, wherein adjacent sides of the bases of the heat sinks are pinned together.

12. The power controller of claim 10, wherein the first heat sink is mounted to the second heat sink using a metal bar.

13. The power controller of claim 10, wherein a first side plate of the power controller is mounted to an adjacent side of the base of the first heat sink and a second side plate of the power controller is mounted to an adjacent side of the base of the second heat sink.

14. The power controller of claim 10, wherein a fan bracket of the power controller is mounted to an adjacent side of the base of the first heat sink and an adjacent side of the base of the second heat sink.

15. The power controller of claim 10, wherein a back plate of the power controller is mounted to an adjacent side of the base of the first heat sink and an adjacent side of the base of the second heat sink.

16. The power controller of claim 10, further comprising:

a third switching device; and

a third heat sink in contact with the third switching device for dissipating heat generated by the third switching device, the third heat sink including a base and a plurality of fins extending from the base,

wherein the base of the second heat sink is mounted to the base of the third heat sink to form a heat sink assembly.

17. A power controller comprising

a switching device;

a heat sink in contact with the switching device for dissipating heat generated by the switching device, the heat sink including a base and a plurality of fins extending from the base;

a semiconductor temperature sensor mounted to the heat sink; and

an alarm for generating a warning signal in response to the semiconductor temperature sensor, the warning signal occurring prior to shut down of the power controller.

18. The power controller of claim 18, wherein the semiconductor temperature sensor is potted in a crimp lug.

19. The power controller of claim 18, wherein the power controller comprises multiple heat sinks, each heat sink includes a temperature sensor mounted thereon, and the alarm is configured to generate a warning signal in response to each temperature sensor.

20. A power controller comprising:

switching means;

heat dissipation means sink in contact with the switching means for dissipating heat generated by the switching means;

cooling means for directing cooling air toward the heat dissipation means; and

guiding means for dividing the cooling air such that part of the cooling air flows through the heat dissipation means and part of the cooling air flows through a channel over the heat dissipation means.